

Technical Information  
 Electrical Data For YD & YU Series Motors  
**Efficiency and Power Factor at Partial Loads**



شرکت صنایع ماشینهای الکتریکی جوبین (جمکو)  
 Jovain Electrical Machines Industries Co. (JEMCO)

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Efficiency(%) at Partial load				
1/4	1/2	3/4	4/4	5/4
of full load				
93	96	97	97	96.5
92	95	96	96	95.5
90	93.5	95	95	94.5
89	92.5	94	94	93.5
88	91.5	93	93	92.5
87	91	92	92	91.5
86	90	91	91	90
85	89	90	90	89
84	88	89	89	88
80	87	88	88	87
79	86	87	87	86
78	85	86	86	85
76	84	85	85	83.5
74	83	84	84	82.5
72	82	83	83	81.5
70	81	82	82	80.5
68	80	81	81	79.5
66	79	80	80	78.5
64	77	79.5	79	77.5
62	75.5	78.5	78	76.5
60	74	77.5	77	75
58	73	76	76	74
56	72	75	75	73
55	71	74	74	72
54	70	73	73	71
53	68	72	72	70
52	67	71	71	69
51	66	70	70	68
50	65	69	69	67
49	64	67.5	68	66
48	62	66.5	67	65
47	61	65	66	64
46	60	64	65	63
45	59	63	64	62
44	57	62	63	61
43	56	60.5	62	60.5
42	55	59.5	61	59.5
41	54	58.5	60	58.5

Power Factor at Partial load				
1/4	1/2	3/4	4/4	5/4
of full load				
0.7	0.86	0.9	0.92	0.92
0.65	0.85	0.89	0.91	0.91
0.63	0.83	0.88	0.9	0.9
0.61	0.8	0.86	0.89	0.89
0.57	0.78	0.85	0.88	0.88
0.53	0.76	0.84	0.87	0.87
0.51	0.75	0.83	0.86	0.86
0.49	0.73	0.81	0.85	0.86
0.47	0.71	0.8	0.84	0.85
0.45	0.69	0.79	0.83	0.84
0.43	0.67	0.77	0.82	0.83
0.41	0.66	0.76	0.81	0.82
0.4	0.65	0.75	0.8	0.81
0.38	0.63	0.74	0.79	0.8
0.36	0.61	0.72	0.78	0.8
0.34	0.59	0.71	0.77	0.79
0.32	0.58	0.7	0.76	0.78
0.3	0.56	0.69	0.75	0.78
0.29	0.55	0.68	0.74	0.77
0.28	0.54	0.67	0.73	0.77
0.27	0.52	0.63	0.72	0.76
0.26	0.5	0.62	0.71	0.76

**Notes :**  
 The values of efficiency  $\eta$  and power factor  $\cos\phi$  are listed versus rated output in the selection tables of the individual sections of the catalogs.  
 The partial load values given in these tables are averages . Precise values can be given on request.

